

CY-084型压阻式压力传感器**CY-084 Piezoresistive Pressure Sensor****1. 工作原理**

利用硅的压阻效应原理，实现压力测量中的力—电转换。传感器是由敏感芯体和信号调理电路组成。当压力作用于传感器时，敏感芯体内硅片上的惠斯登电桥的输出电压发生变化，信号调理电路将输出电压信号进行放大处理、同时进行温度补偿、非线性补偿，由于在信号调理电路中选用了满负荷输出运算放大器，使传感器的电性能满足技术指标要求。

2. 特点

CY-YZ-150型压阻式压力传感器经过严格的工艺检验，通过严酷的耐环境试验。该型号传感器具有满负荷输出、精度高、热稳定性好、耐腐蚀、抗振动、抗电磁干扰等特点。

3. 应用范围

适用于航空、航天、军事装备等领域及恶劣环境条件下的压力测量。

1. Working Principle

Silicon piezoresistive effect principle was adopted in order to realize pressure measurement of force – electrical conversion. Sensor is composed of sensitive core and the signal conditioning circuit. When pressure acts on sensors, output voltage of Wheatstone bridge of silicon inside sensitive core body will change, which is amplified by signal conditioning circuit, at the same time temperature compensation and nonlinear compensation are made, due to selection of full output operational amplifiers in signal conditioning circuit, the sensor's performance meet the requirements of technical indicators.

2. Characteristic:

CY – YZ – 150 piezoresistive pressure sensor have passed strict process inspection and the harsh environment test. It has characteristics of full output, high precision, good thermal stability, corrosion resistance, vibration resistance, resistance to electromagnetic interference, etc.

3. Application:

Apply to pressure measurement in areas such as aviation, spaceflight, military equipment and under the condition of the severe environment.



图 Picture CY-083